

REMARKS

In response to the above-identified Office Action, Applicants amend the application and seek reconsideration thereof. In this response, Applicants amend Claim 1. Applicants add new Claims 18-21. Applicants do not cancel any claims. Accordingly, Claims 1, 2 and 16-21 are pending.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attachment is captioned "Version With Markings To Show Changes Made."

I. Claims Rejected Under 35 U.S.C. §102(b)

The Patent Office rejects Claims 1, 2 and 16 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,399,605 to Dash, et al. ("Dash").

In order to anticipate a claim, the relied upon reference must disclose every limitation of the claim. Among other limitations, amended independent Claim 1 recites a circuit device with a first transistor with a first metal gate electrode and a second transistor with a second metal gate electrode, wherein the gate electrodes comprise the same type of metal. Applicants submit that not all of these limitations are disclosed by Dash.

In making the rejection, the Patent Office relies on Dash to show a circuit device having a first metal gate electrode (a portion of layer 56) made of aluminum and a second metal gate electrode 50 made of platinum silicide (Col. 4, lines 31-35). In response, Applicants note that amended independent Claim 1 recites that the two gate electrodes comprise the same type of metal yet have different work functions that correspond to one of P-type silicon and N-type silicon. Dash fails to disclose this limitation. Specifically, Dash utilizes different types of metal to obtain complementary work functions for different portions of the circuit device shown in Figure 9. Therefore, at least this limitation of Applicants' amended independent Claim 1 is not disclosed by Dash.

Accordingly, Applicants respectfully request withdrawal of the rejection of amended independent Claim 1. Claims 2 and 16 depend from independent Claim 1 and contain all of the

limitations thereof. Therefore, Claims 2 and 16 are not anticipated at least for the same reasons as independent Claim 1.

II. Claims Rejected Under 35 U.S.C. §103(a)

The Patent Office rejects Claim 17 under 35 U.S.C. 103(a) as being obvious over Dash.

In order to render a claim obvious, the relied upon reference must teach or suggest every limitation of the claim such that the invention as a whole would have been obvious at the time the invention was made to one skilled in the art. Claim 17 depends from amended independent Claim 1 and contains all of the limitations thereof. Therefore, the arguments and reasoning set forth above regarding Claim 1 apply equally here to Claim 17.

Specifically, Dash fails to teach or suggest a device with two gate electrodes made of the same material, wherein the electrodes have different work functions. The Patent Office acknowledges that one gate electrode of Dash is made of aluminum while the other gate electrode of Dash is made of platinum silicide. Therefore, at least this limitation is neither taught nor suggested by Dash.

Accordingly, Applicants respectfully request withdrawal of the rejection of Claim 17.

CONCLUSION


In view of the foregoing, it is believed that all claims now pending (1) are in proper form, (2) are neither obvious nor anticipated by the relied upon art of record, and (3) are in condition for allowance. A Notice of Allowance is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (310) 207-3800.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly, extension of time fees.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

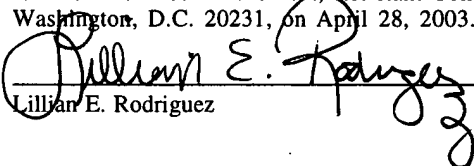
Dated: 4/28, 2003


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CERTIFICATE OF MAILING:

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Box Non-Fee Amendment, Assistant Commissioner for Patents, Washington, D.C. 20231, on April 28, 2003.


Lillian E. Rodriguez
4-28-03
April 28, 2003

VERSION WITH MARKINGS TO SHOW CHANGES MADE
IN THE CLAIMS

Please amend the claims as follows:

1. (Four Times Amended) A circuit device comprising:
 - a first transistor including a first metal gate electrode over a first gate dielectric on a first area of a semiconductor substrate and having a work function corresponding to the work function of one of P-type silicon and N-type silicon;
 - a second transistor complementary to the first transistor including a second metal gate electrode over a second gate dielectric on a second different area of a semiconductor substrate and having a work function corresponding to the work function of the other one of P-type silicon and N-type silicon; and
 - wherein the first metal gate electrode and the second metal gate electrode [are not in direct physical contact with each other and] are each separately disposed in respective ones of the first area and the second area of the semiconductor substrate and comprise the same type of metal.

Claims 18-21 have been added.